

MONTHLY WEATHER REVIEW,

OCTOBER, 1875.

WAR DEPARTMENT,

Office of the Chief Signal Officer.

DIVISION OF

TELEGRAMS AND REPORTS FOR THE BENEFIT OF COMMERCE AND AGRICULTURE.

INTRODUCTION.

The current REVIEW is made up from meteorological returns from the following sources: 94 U. S. Signal Service Stations; 49 Surgeons, U. S. A.; 1 Naval Hospital; 13 Canadian Meteorological Service and 271 Voluntary Observers, together with material obtained from marine log-books, shipping news and other press-reports. The chief features of the meteorology of October are—

First. The low mean temperature of the month, which, as will be seen under the appropriate heading, has been universally below the normal October temperature, except on the Pacific coast. Owing to this low temperature unusually early and destructive frosts occurred in most of the Southern States, and early and heavy snows in the northern and lake districts.

Second. The number and severity of general and local storms is also another marked characteristic. The local storms have been in many cases destructive to property. The frequency and force of the general storms rendered necessary the largest number of Cautionary Signals ever displayed in any one month by the Signal Service.

ATMOSPHERIC PRESSURE.

The region over which the barometer has stood highest during the month, will be seen from the isobaric lines (in black) on Chart No. II, to be the Gulf States and Tennessee. The area over which the pressure has been lowest, embraces Lakes Superior and Huron and the country eastward to the province of Quebec. The highest mean pressures for October, reported from stations, are 30.15 inches at Shreveport, La., and 30.19 at Vicksburg. The lowest mean pressure is 29.84 at Alpena on Lake Huron. This geographical distribution of pressure is normal for the month of October.

(1.) *Areas of High Barometer.*—As usual, the high pressure areas, which have traversed the territory of the United States, have entered the field of observation from the Northwestern and Western sections, and have advanced quite rapidly until reaching the Gulf or Atlantic States, where their progression has been comparatively slow. These areas of high barometer have been attended, by fresh or high northwest winds and by low temperatures, producing frequent and severe frosts, and, in the latter part of the month, frequent snows in the northern and lake sections of the country. They have also been preceded on the Atlantic and western Gulf coasts by high and dangerous winds.

I. The first prominent area of high pressure was reported, on the 1st of October, in Kansas and the Indian Territory, and moved slowly eastward, with increasing pressure.